

Preproposal Report

Project Title: NABat Pilot – NWRS, Pacific Region

Project Description:

3-year pilot implementation of the NABat acoustic monitoring protocols on national wildlife refuges in the Pacific Region. Goals of NABat are to 1) Develop and maintain a long-term continental program to monitor bat distributions and indices of abundance at range-wide, regional, and local scales and 2) Provide regular analysis and reporting on the status and trends of bat populations to inform managers and policy makers so that they can manage bat populations effectively.

Coordinate with USGS and NPS to apply the national GRTS-based sampling frame and accompanying field protocol to refuges. Data collected are submitted to Bat Population Database for inclusion in the NABat program.

I&M Program invests in bat detectors and analysis software. Refuge staff deploy detectors in the field, following NABat protocols. I&M staff provide user guides, support to refuge staff, call file analysis, and data management. Refuges that possess bat call analysis software can do their own call file analysis, if desired.

Detectors are available for other uses outside the NABat sampling window, including baseline inventory, assessing seasonal use patterns, winter monitoring, etc.

Project Type(s): Monitoring, Data Management

Project Category(ies) (select one or more): Baseline Inventory, Climate Change, Data Management

Relevance to Management or Understanding of Refuge Resources:

Does the project address a refuge management issue? No

Does the project provide information about a refuge resource(s) that is lacking or poorly understood? Yes

If you answered yes to either question, then briefly describe how the project informs a refuge management decision/process and/or enhances knowledge of a refuge resource(s). Also, briefly describe what makes this project notable in comparison to what the refuge staff typically undertakes as part of its regular or reoccurring biological activities.

Many refuges lack basic information on bat populations, including species presence. Refuges typically lack the equipment for acoustic bat detection and knowledge of call file analysis. This project supplements typical refuge activities by providing equipment and support to monitor bats, species that are typically understudied on refuges.

Justifications (benefits) for project:

Coordinate monitoring among multiple refuges to gain efficiencies, Create a species list for a refuge, especially for rare/unique communities, Determine the status and trend of species, species group, or habitat, Determine the presence of rare, endemic species on refuge lands, Data management system or data management related SOP development to support data lifecycle, Protocol development to support new or ongoing surveys

Participating refuges: To be determined. All refuges on the mainland have potential to be included. Participation depends on selection within the national sampling framework and willingness/ability of refuge staff. Aiming for 30 “Bat Grid” cell to be sampled in the region.

Provide a project timeline:

Design: March - May 2015

Data Collection : June – July 2015, 2016, 2017

Data Management: June – September 2015, 2016, 2017

Reporting: by December of year of data collection. Data feeds into national bat database for long-term trend analysis at multiple scales. Analysis and reporting conducting by NABat pilot committee.

Project Completion Dates: Pilot project complete by December 2017. Vision for NABat is a long-term monitoring program conducted indefinitely. USFWS could continue to contribute pending results of this and other pilot projects.

Budget estimate (If the project requires multiple years, then itemize cost annually.)

Total project cost \$55,014

\$51,014 (FY15) – up front purchase of detectors, supplies, and software.

\$2,000 (FY16) – equipment replacement, if needed

\$2,000 (FY17) – equipment replacement, if needed

Possible funding sources (select one or more): I&M, NRPC**How will the project funding be fully spent or obligated? (select one or more):**

Field staff time, Equipment/supplies

How could the project be conducted? (select one or more):

Refuge staff, I&M staff provides equipment, project coordination and oversight, data management and interim reporting. Refuge field staff deploy bat detectors. USFWS and NPS collaborate on database development. USGS manages long-term data in the Bat Population Database and conducts long-term trend analysis and reporting.

Are there partners that would be directly involved with the project? Yes

List them and briefly describe their roles/contributions. Partners can be FWS program staff (e.g., Water Resources, Fire, Migratory Birds, I&M) or non-FWS entities providing in-kind support (e.g., equipment, staff time, funding).

NABat is a collaborative effort between multiple agencies, nationwide and internationally. An interagency committee of bat biologists and statisticians developed the sampling frame and protocols. USGS manages the Bat Population Data, to which data are contributed. Region 1 I&M Program is working with National I&M Office and NPS to pilot implementation of this program in the Pacific Region.

What are the expected product(s)? Report, Database

Contact person: Jenny Barnett, 509-380-6479